

WHAT IS CLAIMED IS:

1. A contactless radio frequency magnetic field data transmission card, for transceiving a message with a radio frequency (RF) magnetic field identification reader, comprising:

5 an antenna module;

 a micro processing unit for transceiving the message according to a transmission protocol; and

 a magnetic field identification chip, coupled to the antenna module and the micro processing unit, for converting the message into a magnetic field signal and then
10 transmitting the magnetic field signal through the antenna module, and converting a magnetic field signal received by the antenna module into the message.

2. The contactless radio frequency magnetic field data transmission card of claim 1, wherein the micro processing unit comprises a micro controller and a liquid crystal display.

15 3. The contactless radio frequency magnetic field data transmission card of claim 2, wherein the micro processing unit further comprises an input peripheral.

4. The contactless radio frequency magnetic field data transmission card of claim 1, wherein a package according to the transmission protocol comprises a 4-bit package header, a 4-bit code, a message string with a length dependent on the 4-bit code.

20 5. The contactless radio frequency magnetic field data transmission card of claim 1, wherein the magnetic field identification chip is a W55MID50 chip, manufactured by Winbond Electronics Corporation.

6. The contactless radio frequency magnetic field data transmission card of claim 1, wherein the contactless radio frequency magnetic field data transmission card is used as

an e-purse.

7. The contactless radio frequency magnetic field data transmission card of claim 1, wherein the contactless radio frequency magnetic field data transmission card is used as an e-card.

5 8. A contactless radio frequency magnetic field data transmission system, comprising:

 a radio frequency magnetic identification reader, having a magnetic identification chip for transceiving a magnetic field signal; and

 a contactless radio frequency magnetic field data transmission card, having a
10 magnetic identification chip for transceiving the magnetic field signal,

 wherein a message is transmitted between the radio frequency magnetic identification reader and the contactless radio frequency magnetic field data transmission card according to a transmission protocol.

9. The contactless radio frequency magnetic field data transmission system of
15 claim 8, wherein the contactless radio frequency magnetic field data transmission card further comprises an antenna module and a micro processing unit.

10. The contactless radio frequency magnetic field data transmission system of claim 9, wherein the micro processing unit comprises a micro controller and a liquid crystal display.

20 11. The contactless radio frequency magnetic field data transmission system of claim 10, wherein the micro processing unit further comprises an input peripheral.

12. The contactless radio frequency magnetic field data transmission system of claim 8, wherein the magnetic field identification chip is a W55MID50 chip, manufactured by Winbond Electronics Corporation.

13. The contactless radio frequency magnetic field data transmission system of claim 8, wherein the contactless radio frequency magnetic field data transmission card is an e-card.

5 14. The contactless radio frequency magnetic field data transmission system of claim 8, wherein the contactless radio frequency magnetic field data transmission card is an e-purse.

15. The contactless radio frequency magnetic field data transmission system of claim 8, wherein the radio frequency magnetic identification reader is an e-card.

10 16. The contactless radio frequency magnetic field data transmission system of claim 8, wherein the a package according to the transmission protocol comprises a 4-bit package header, a 4-bit code, a message string with a length dependent on the 4-bit code.